

National Climatic Data Center

DATA DOCUMENTATION

FOR

DATA SET 6145 (DSI-6145)

CAC Tropical Strip Winds and Outgoing Radiation

January 21, 2003

National Climatic Data Center
151 Patton Ave.
Asheville, NC 28801-5001 USA

Table of Contents

Topic	Page Number
1. Abstract.....	3
2. Element Names and Definitions:	3
3. Start Date.....	4
4. Stop Date.....	4
5. Coverage.....	4
6. How to order data.....	4
7. Archiving Data Center.	4
8. Technical Contact.....	4
9. Known Uncorrected Problems.....	4
10. Quality Statement.....	4
11. Essential Companion Data Sets.....	4
12. References.....	4

1. **Abstract:** This data set is comprised of one tape that contains monthly means of u and v components of the winds at 1000, 850, 700, 500, 300, and 200 mb and the outgoing longwave radiation (OLR) for each month for which they are available from March 1968 through February 1988. The data for each year (March through February) constitute 1 file, so there are 20 files on the tape. Each file contains 156 records, one for each component at each of 6 levels and another for the OLR, all for each of 12 months. Each record contains a descriptive header and 1 data field. The records are 9945 EBCDIC characters long.

2. Element Names and Definitions:

The first 4 variables constitute the header. Their values are:

<u>Variable</u>	<u>Values</u>	<u>Descriptions</u>
IYEAR	68-88	year of data - 1900
IMONTH	1-12	month of data (1 Jan, 12 Dec)
ITYPE	1-3	Data type 1-u component 2-v component 3-OLR
ILEVEL	1000-200,0	level of the data (mb), 0 is OLR

If all header values are zero, the data array is empty. No 850 mb winds are available prior to December 1974, no 1000 mb winds prior to December 1975, and no OLR before June 1974. No winds are available for October and November 1972, and no OLR data from March - December 1978.

Data is a 72x23 point array of data (FORTRAN definition: REAL*4 DATA (72,23)) with 5° grid spacing in longitude and variable from 5°, to 3.5° in latitude. Longitudes begin at 0° (Greenwich) and increase toward the east, so that point 2 of each row is 5°E, 3 is 10°E and so on. The latitudes begin at 48.1°S and increase northward. Row 12 is the equator and row 23 is 48.1°N. The latitudes are 48.1°, 44.6°, 41.0°, 37.1°, 33.0°, 28.7°, 24.2°, 19.6°, 14.8°, 10°, 5° N and S and the Equator. The wind components are in ms⁻¹ while the OLR is in Wm⁻².

The winds are derived from the NMC Final Analysis. A brief description of the different analyses used through February 1979, along with further references, is found in Arkin (Mon. Wea. Rev., 1982). One major change not described there is the switch to a spectral model and the use of non-linear normal mode initialization. Some further details may be found in Kistler and Parrish (Mon. Wea. Rev., 1982).

The OLR data are derived from advanced very high resolution radiometer (AVHRR) window channel radiances. A description of the data processing may be found in Gruber and Winston (Bulletin of the AMS, 1978.)

The tape containing the data was created on an IBM 360/195 under OS/MVT. The tape is 1600 bpi and unlabeled. The appropriate JCL is:

```
//FT01F001 DD UNIT=TAPE9, DISP=(OLD,PASS),
// LABEL=(#,NL), VOL=SER=TAPENM,
// DCB=(RECFM=F,LRECL=9945,BLKSIZE=9945)
```

where # is the number of the file containing the data one wishes and TAPENM is
:
:
:

the number of the tape. The tape should be usable on any computer which can read 9-track 1600 bpi tapes.

3. **Start Date:** 19680301

4. **Stop Date:** 19880228

5. **Coverage:** No information provided with original documentation.

6. **How to Order Data:**

Ask NCDC's Climate Services about the cost of obtaining this data set.

Phone: 828-271-4800

FAX: 828-271-4876

E-mail: NCDC.Orders@noaa.gov

7. **Archiving Data Center:**

National Climatic Data Center

Federal Building

151 Patton Avenue

Asheville, NC 28801-5001

Phone: (828) 271-4800.

8. **Technical Contact:**

National Climatic Data Center

Federal Building

151 Patton Avenue

Asheville, NC 28801-5001

Phone: (828) 271-4800.

9. **Known Uncorrected Problems:** No information provided with original documentation.

10. **Quality Statement:** No information provided with original documentation.

11. **Essential Companion Datasets:** No information provided with original documentation.

12. **References:** No information provided with original documentation.

:
:
: